

actions in or affecting navigable waters of the United States, including the discharge of dredged or fill material in such waters, and for the transportation of dredged material for the purpose of dumping it in ocean waters.

(6) Control the discharge of sewage and bilge waste from vessels in accordance with US Coast Guard, EPA, DOD or State regulations.

(7) Control the runoff of surface waters to minimize soil erosion, downstream flooding and pollution of waterways by sediments and contaminants.

(8) Conserve water resources by instituting regulatory measures where needed and by the judicious use of wastewater for consumptive purposes.

(9) Provide all personnel with drinking water that meets the quality standards specified by The Surgeon General.

(10) Commander, U.S. Army Materiel Development and Readiness Command will develop appropriate pollution control devices and retrofit vessels in the inventory required to meet specified standards.

§ 650.56 Related publications.

(a) Pub. L. 92-500; Federal Water Pollution Control Act Amendments of 1972 (84 Stat. 100, 33 U.S.C. 1163).

(b) Pub. L. 92-532; Marine Protection, Research, and Sanctuaries Act of 1972.

(c) Rivers and Harbors Act of 1899 (33 U.S.C. 401-413).

(d) Executive Order 11752, "Prevention, Control and Abatement of Environmental Pollution at Federal Facilities," December 17, 1973.

(e) TB 55-1900-206-14, Control and Abatement of Pollution by Army Watercraft.

(f) AR 56-9, Watercraft.

STANDARDS AND PROCEDURES

§ 650.57 Water supply standards.

Potable water supply standards must meet, as a minimum, the standards set by the U.S. Public Health Service (42 CFR 72.201-207)/EPA as interpreted by The Surgeon General of the Army (TB MED 229).

§ 650.58 Water quality standards.

(a) Under the provisions of Pub. L. 92-500 it is the responsibility of the States to establish water quality

standards and formulate an overall plan for achieving and enforcing these water quality standards. These criteria are based on the quality of water necessary to achieve and maintain use classifications of water such as recreation, fish and wildlife propagation, public water supply, and industrial and agricultural uses. States are also required to establish effluent discharge limitations necessary to achieve and maintain the desired use classification. For Army installations, implementation and enforcement of the applicable federally or State developed effluent limitations, and water quality standards are accomplished by the regional headquarters of the Environmental Protection Agency through the National Pollutant Discharge Elimination System.

(b) The following effluent limitations are minimum standards which have been established pursuant to Pub. L. 92-500. More stringent effluent limitations may be established by the Administrator, EPA, to attain or maintain the water quality standards established by the State. Permissible effluent limitations, whether based on Federal or State water quality standards or on water quality criteria will be specified by the EPA Regional Administrator in the NPDES permit issued for each point of discharge.

§ 650.59 Effluent limitations.

(a) Domestic waste water effluents:

(1) As an interim limitation, all effluents from predominately domestic sources will be receiving the equivalent of secondary treatment as a minimum by July 1, 1977.

(2) By July 1, 1983, domestic wastewater limitations will be based on the best practicable waste treatment technology. Planning for 1983 discharge requirements will be clarified pending case by case evaluation of EPA criteria for 1983 which should be contained in NPDES permits to be issued in the 1977-1980 time frame. It may be assumed that the 1983 standards would require some form of advanced wastewater treatment, (i.e., phosphate, nitrate or carbonate removal; very low values of biochemical/chemical oxygen demand, suspended solids and fecal

coliform bacteria; and minimal fluctuations in pH and temperature (/).

(b) Industrial wastewater effluents:

(1) As an interim limitation all effluents from existing industrial sources will be treated by processes employing the "best practicable control technology currently available" by July 1977. Guidelines and standards defining effluent limitations for best practicable control technology currently available are published under 40 CFR parts 401 through 447. At present only two industrial categories apply to Army activities; these are 40 CFR part 413, Electro, plating, and 40 CFR part 415, Inorganic Chemicals. EPA will publish regulations in the form of effluent limitations guidelines and standards of performance and pretreatment for ammunition production facilities at a later date. DAEN-ZCE will issue guidance as appropriate.

(2) By July 1, 1983, treatment of existing industrial wastewater effluents will employ the "best available technology economically achievable." Effluent limitations based on the best available technology economically achievable have been defined and are published in previously mentioned 40 CFR parts 401 through 447.

(3) Effluent limitations for new sources are in most cases based on best available technology economically achievable and, therefore must necessarily meet the "1983 standards." These effluent limitations are also published with the guidelines and standards in 40 CFR parts 401 through 447.

(c) *Oil.* The discharge of oil or effluents containing oil is limited by the quality determined to be harmful to the public health or welfare; or by applicable water quality standards; or by the amount which will cause a film or sheen upon a discoloration of the surface of the water or adjoining shorelines; or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines (40 CFR part 110 and subpart F of this part).

(d) *Pretreatment Standards (40 CFR part 128).* Nondomestic wastewater effluents from Army installations which are discharged to regional or municipal sewage treatment works must comply with the following limitations:

(1) Effluents will be treated sufficiently to remove wastes which: Would create a fire or explosion hazard, have pH lower than 5.0, would obstruct flow in sewers or interfere with proper operation of the works; or are introduced at an excessive flow or pollutant discharge rate likely to interfere with proper treatment.

(2) If the characteristics of the effluent qualify the Army installation as a "major contributing industry" and the effluent contains "incompatible pollutants" then the effluent will be pretreated prior to discharge, employing technology described in § 650.59(b)(1), (2) or (3) depending on whether the effluent is from an existing or new source. Such pretreatment is necessary to prevent the discharge of any pollutant into regional or municipal treatment works which may interfere with, pass through or otherwise be incompatible with such works.

(e) *Toxic and hazardous pollutants.* The EPA determines and publishes a list of toxic and hazardous pollutants and issues effluent or dumping limitations for these substances. Limitations often include absolute prohibition against discharge. Both The Surgeon General and the Chief of Engineers will maintain a list of such pollutants for which effluent guidelines are issued or are pending and will monitor suspected toxic pollutants until a decision on the actual effects is made. The discharge of these toxic pollutants from all Army facilities will comply with the limitations set by the EPA. In all cases, the discharge of a suspected toxic pollutant will be strictly controlled or prohibited until a determination is made as to the potential dangers involved and effluent limitations are established by the EPA and The Surgeon General of the Army.

(1) *Prohibited substances.* The toxic pollutants which have been prohibited from effluent discharges are listed in 40 CFR part 129, EPA Regulations on Listing Toxic Pollutants. Other prohibited substances which may not be ocean dumped are listed in 40 CFR 227.21.

(2) *Hazardous substances.* The EPA listing of hazardous substances which are subject to strict effluent limitations will be addressed in 40 CFR part 116.

(f) *Thermal pollution.* Thermal discharges are subject to the best practicable and best available control technology requirements, as are other non-domestic pollutants. Thermal pollutant standards vary depending on temperature of the receiving water, the temperature and relative volume of the effluent, and effects such discharges will have regarding the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife in and on the receiving water. Therefore, cases which involve thermal pollution are highly individual and are generally limited to large sources of thermal pollution such as steam electric power plants (40 CFR part 423).

(g) *Watercraft.* Effluent limitations from watercraft are established by the US Coast Guard (33 CFR part 159), Department of Defense (DOD Dir 6050.4), EPA (40 CFR part 140) and the States. Department of the Army will comply with standards and procedures set by the Office, Secretary of Defense (DOD Dir 6050.4) and by TB 55-1900-206-14, Control and Abatement of Pollution by Army Watercraft.

(1) *Nondomestic waste discharge limitations.* Nondomestic waste (i.e., bilge, fuels, lubricants and other non-human wastes) discharges to navigable waters are prohibited (40 CFR part 110). Exempt from this prohibition are discharges of oil from properly functioning vessel engines, provided such normal discharges are not deemed harmful.

(2) *Domestic waste discharge limitation.* (i) EPA (40 CFR part 140), establishes Federal effluent limitation standards for the discharge of sewage from vessels. All vessels (ships, boats, and other watercraft) owned and operated by the US Army within the navigable waters of the United States, except those not equipped with installed toilet facilities, must be equipped to meet marine sanitation device (MSD) standards. Only those vessels scheduled to be decommissioned, inactivated, sold or otherwise disposed of by the end of FY 1981 are excluded from these provisions. In order to meet EPA standards, DARCOM will develop MSD certification testing, acceptance, operation and maintenance procedures for the Army based on guidance provided in

paragraph VII, DOD Directive 6050.4. The following standards will apply:

(A) Marine sanitation devices will be designed and operated to prevent the overboard discharge of untreated or inadequately treated sewage or any waste derived from sewage, into the navigable waters of the United States, except as hereinafter provided.

(B) Any existing vessel equipped with a Type I MSD which was installed on or before April 1, 1976, or within 3 years thereafter, is in compliance so long as the device remains satisfactorily operable. Any existing vessel not equipped with any MSD on or before this date must install either a Type II or Type III MSD on or before April 1, 1981, except those vessels not equipped with installed toilet facilities.

(C) Any existing vessel equipped at any time with a Type II or Type III MSD and certified by either DARCOM or the US Coast Guard, is in compliance so long as the long device remains satisfactorily operable.

(D) All new vessels will be equipped only with a Type II or a Type III MSD certified by DARCOM or the US Coast Guard, on or before April 1, 1978, except those vessels not equipped with installed toilet facilities.

(E) Any vessel operating on a freshwater lake or impoundment will comply with the applicable EPA "no discharge" standard and regulations of the US Coast Guard, to include compliance schedules. If the vessel is equipped with any MSD, the device will be modified as necessary to preclude accidental discharge into such waters.

(F) Prior to the compliance dates stated above, more rigid or compelling standards which are imposed by State, regional or local jurisdictions may prevail. After compliance, a more rigid standard will not take effect sooner than April 1, 1981.

(G) Any "no discharge" standard will not apply until the Administrator, EPA, determines that adequate facilities for safe and sanitary removal and treatment of sewage from all vessels are reasonably available for such waters to which the prohibition applies, or that the water quality requires a more stringent standard than that provided by 40 CFR part 140.

(H) Operators will not be exposed to hazardous chemicals or conditions during normal operation and maintenance of MSD's.

(ii) Because of the above standard, MSD's under development or procurement for new vessels or to replace existing equipment should be selected with "no discharge" as a possible parameter and that full consideration be given to systems based on holding tanks rather than actual treatment systems. DARCOM will ensure that appropriate Environmental Protection Control Reports (RCS DD-I&L(SA) 1383) on MSD retrofit costs are forwarded through channels to HQDA (DAEN-FEU) WASH, DC 20314 in accordance with chapter 10, this regulation.

(iii) MSD's will be so designed to preclude contamination of potable water supplies.

§ 650.60 Ocean dumping standards.

The Marine Protection, Research and Sanctuaries Act of 1972 (Pub. L. 92-532) and EPA prohibit the dumping of certain materials into ocean waters and controls the dumping of all other materials. Army controlled activities will comply with the regulations and standards set by this act and notify HQDA (DAEN-ZCE) WASH DC 20310 of all permit requests. (40 CFR parts 220 through 227 and 33 CFR 323.324).

§ 650.61 Activities in navigable waters.

The construction of any structure in or over any navigable water of the United States, the excavation from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition or capacity of such waters must have prior approval of the Chief of Engineers or his authorized representative. Authority for such work is provided by issuance of a permit. Policy, practice and procedures are contained in 33 CFR part 322.

§ 650.62 Storage of hazardous materials.

Storage facilities for materials which are hazardous to health, and for oils, gases, fuels or other materials capable of causing water pollution, to either surface or ground waters, if acciden-

tally discharged, will be so located as to minimize or prevent such spillage. Measures necessary to entrap spillage, such as catchment areas, relief vessels, of entrapment dikes, will be installed so as to prevent and/or contain accidental pollution of water (subparts F and I of this part).

§ 650.63 Water supply treatment procedures.

Water supplies will be monitored and, where necessary, treated in accordance with AR 420-46, Water and Sewerage, TB MED 229; AR 115-21, Hydrologic Services for Military Purposes and AR 115-20, Field Water Supply.

§ 650.64 Water conservation.

(a) *Reduce consumption.* All uses of water will be periodically surveyed and action taken to reduce water consumption wherever possible. The design and construction of new facilities and processes will consider minimized consumption of water, in particular potable water, as a major parameter. Vegetation and landscaping will be selected for the particular climate and geographical location so as to minimize or eliminate the need for irrigation.

(b) *Reuse-recycle.* In addition to reducing initial water consumption, water conservation measures will include the reuse or recycling of wastewater whenever practicable. The design methodology for new or for modification of old facilities and processes will identify potential re-use or recycling of wastewater alternatives and such alternatives will be selected whenever it is determined economically competitive with "once through" processes. Examples include closed cycle cooling systems for power plants and the use of land based sewage treatment systems.

(c) *Erosion Control.* Operations will be scheduled and designed to reduce or eliminate the destruction of vegetation and other ground cover which prevents erosion and stream siltation. Siting of new facilities will consider topography and soil conditions to reduce construction in areas sensitive to erosion. Construction techniques and methods that minimize erosion will be identified in all construction contracts and design/construction specifications. Large

parking lots, roof areas, aircraft facilities, and roads which result in rapid runoff will be minimized wherever practicable. Periodic surveys will be made to identify areas where erosion has occurred and action will be initiated to control further erosion such as planting vegetation; controlling and, where necessary, impounding stormwater from areas of rapid runoff.

§ 650.65 Minor industrial and municipal operations.

Wastewater discharge from minor industrial and municipal facilities such as wash racks, engine steam cleaning operations, water treatment plant backwash, swimming pool filter backwash, and other similar activities will be connected to the sanitary sewer wherever feasible. It should be noted that effluent from these activities not connected to sanitary sewers requires an NPDES discharge permit. To eliminate costly and difficult treatment and monitoring programs all possible efforts should be directed to connecting with the sanitary lines. At remote locations, a holding tank may be used which is sized to hold all drainage between pumpouts. After pumpout, the wastewater will be transported to another location for treatment and disposal. Other alternatives include onsite treatment which would require a discharge permit, or a closed cycle system which would treat and re-use the wastewater. In the latter case, if there were no discharges, a permit would not be required.

§ 650.66 NPDES permits.

The NPDES permit program (40 CFR part 125) requires that all discharges of pollutants from point sources into navigable waters, (§ 650.53(a)(6)), will be regulated by a discharge permit. This applies to domestic and industrial wastewater. The permit requirement does not extend to discharges from separate storm sewers except where the storm sewers receive industrial, municipal and agricultural wastes or runoff or where the storm runoff discharge has been identified by the Regional Administrator, the State water pollution control agency, or an interstate agency as a significant contributor of pollution. Also exempted are Army con-

trolled properties (except when needed for public use) which are leased to contractors or others under authority of 10 U.S.C. 2657. It is the administrator of the lease who will monitor and institute corrective actions as necessary to insure that the leasee obtains and adheres to the NPDES permit.

(a) *Permit application.* When it is determined that an NPDES permit is required, permit applications will be requested from the applicable EPA Regional Office.

(b) *Draft permits.* A draft permit will be issued based on the permit application. The draft permit will contain effluent limitations necessary to meet water quality standards; compliance schedules identifying dates on when the effluent limitations will be met, monitoring programs identifying type of pollutant to be monitored, method of sampling and analysis, frequency of sampling; and method and frequency of reporting monitoring program results.

(c) *Draft permit review.* EPA is required to provide copies of the draft permit to the installation commander, the state, and the general public for review and comment. In general there will be not less than thirty (30) days in which to provide comment before the final permit is issued. MACOM's will provide copies of all NPDES permits (both draft and final) received from EPA to the U.S. Army Environmental Hygiene Agency, ATTN: HSE-EW, Aberdeen Proving Ground, MD 21010. USAEHA will accomplish: A technical review of each NPDES permit received, provide advice or assistance to the installation commander, through appropriate command channels establish liaison with the EPA, as necessary, to clarify and discuss permit conditions and provide written comment back to the permittee for subsequent passage of written comments to the appropriate EPA Regional Office. Installation commanders will report potential problems arising from the terms of the permits which could impact on the operational capability of the installation to the HQDA (DAEN-FEU) Washington, DC 20314 through appropriate command channels. In addition, the permits will contain instructions pertaining to reporting changes in quality or quantity of wastewater.

(d) *Monitoring reports.* The terms of the permit will, in general, require the monitoring of all wastewater discharges and a periodic report to the EPA Regional Administrator, National Pollutant Discharge Elimination System Discharge Monitoring Report (RCS EPA-1002). In order to determine the effectiveness of the treatment and monitoring programs, copies of all monitoring reports will be forwarded to the USAEHA, ATTN: HSE-EW Aberdeen Proving Ground, MD 21010. Reports are made in accordance with frequency prescribed by each NPDES permit on form EPA 3320-1 (10-72). Forms are available from appropriate EPA Regional Office. (See figure 9-1 and table 9-3 for location and addresses).

(e) *Compliance schedules.* (1) NPDES permits will contain a schedule of compliance with regard to any discharge which is not in compliance with applicable effluent standards and limitations, applicable water quality standards, and other applicable requirements. This schedule will be rigidly enforced. The terms of the permit will, in general, require that the permittee provide the EPA Regional Administrator with written notice of the permittee's compliance not later than 14 days following each interim date of compliance. Copies of this notice will be provided to the operating command and to USAEHA.

(2) In the event of noncompliance with the interim or final requirements, the permittee will immediately provide written notification to the EPA Regional Administrator with information copies to the appropriate operating command, USAEHA and DAEN-ZCE and where necessary, will request a revision to the compliance schedule following the procedure established under 40 CFR 125.23.

(f) *Installations discharging to regional or municipal treatment works.* Permits are not normally required for discharge of domestic wastewater to regional or municipal sewage treatment facilities. However, those installations which find that pretreatment prior to discharge is required may be required to file for a permit.

(g) *Inspections.* The EPA Regional Administrator may, under authority of 40 CFR 125.13 and 125.22, make site visits

and inspections for the purpose of evaluating facilities prior to issuance of an NPDES permit and for the purpose of monitoring compliance with the terms of an issued permit.

(h) *Cooperation with State and regional authorities.* The EPA Regional Administrator, or his designated representative has full and legal authority to make site inspections of Army facilities. However, installation commanders will on the basis of reasonable, specific requests extend the same privileges to authorized state and regional pollution control authorities.

(i) *Security restrictions.* When representatives from Federal, State, or regional environmental pollution control agencies inspect facilities, examine operating records, and make tests to determine adherence to environmental performance specifications, security requirement must be met and the inspectors will be accompanied by either engineer or medical technical representatives designated by the appropriate major Army commander.

(j) *Information requests.* The EPA regional office is the responsible Federal agency regarding enforcement of all water pollution control requirements at Federal facilities in that region. Water pollution control information emanating from Federal facilities should go through the applicable EPA regional office. Therefore, requests for permit related information by state or regional authorities or by responsible members of the general public, should be directed to the applicable EPA regional office (subpart A of this part).

§650.67 Ocean dumping permits.

Permits for the dumping or discharge of materials into ocean waters, other than transportation of dredged material for purpose of dumping in ocean waters, are issued by the EPA. There are two types of permits, one which governs a general category of dumping and one which governs the dumping of special materials. The Administrator of EPA can issue general permits. The authority for issuing most special permits has been delegated to the EPA Regional Offices. Controls governing ocean dumping can be found in 40 CFR parts 220 through 227, "Regulations and Criteria, Transportation for Dumping,

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and Dumping of Material into Ocean Waters.” Most permits require information on the type of pollutant or effluent being discharged or dumped, its quantity and frequency and location of discharge. Permits require monitoring and documentation.

§ 650.68 Corps of Engineers permits.

The construction of any structure in or over a navigable water of the United States, the excavating from or depositing of dredged or fill material in such waters, the accomplishment of any other work affecting the course, condition, location, or capacity of such waters, the discharge of dredged or fill material in navigable waters, and the transportation of dredged material for the purpose of dumping it in ocean waters requires a permit from the Corps of Engineers and will be processed in accordance with 33 CFR 209.120. Application for this permit is made to the local District Engineer. Applications are available from Corps of Engineers District Offices and will be completed for all projects or activities not under the design and supervision of the Chief of Engineers.

§ 650.69 State permits.

(a) Cooperating with and providing information to State and regional authorities does not include making application for State permits of any kind nor obtaining a water quality certification from the State for any activity involving the discharge of a pollutant into navigable waters. Where information or data is to be provided a State authority on a prescribed registration form and authenticated, Army installation commanders will comply with all reasonable requests and forward same with a disclaimer that:

While Federal law does not require military installations to apply for State permits or obtain State water quality certifications, this installation is desirous of complying with the objectives of State and Federal pollution control programs. However, completion of this form is not to be construed as an application for permit. To the best of my knowledge, the information presented herein is correct.

Under unusual circumstances, when the installation commander considers it prudent to respond contrary to the

above guidance, request for waiver will be submitted through appropriate command channels to HQDA (DAEN-ZCE) WASH DC 20310.

(b) In all cases, waiver request will include a legal opinion by the staff judge advocate of the installation concerned or of the next higher command having a staff judge advocate to insure legal sufficiency. Special attention should be given to questions involving registration of sources and compliance schedules to insure that the legal implications of such instruments are understood.

§ 650.70 Operator training and certification.

(a) Operators of water treatment works and sewage treatment works shall meet levels of proficiency consistent with operator certification requirements applicable to the State or region in which the facility is located. (AR 420-15, Certification of Utility Plant Operators and Personnel Performing Inspection and Testing of Vertical Lift Devices).

(b) Necessary training of water treatment works and sewage treatment works operators will be accomplished through programs sponsored by the State in which the facility is located. In the absence of such State or regional programs, training will be accomplished at qualified institutions designated by the MACOM.

§ 650.71 Waivers.

(a) No action which is contrary to the provisions contained in this subpart will be taken without first obtaining a waiver of the requirement from HQDA (DAEN-ZCE) WASH DC 20310.

(b) Waivers may be granted only if the President or the Administrator of EPA finds that the technology to implement such standards is not available or operation of the facilities in question is required for reasons of national security. Requests for such waivers will not be considered by HQDA unless it can be clearly and conclusively demonstrated that operation of the facilities in question and the proposed construction or modification meets the above criteria. Requests for waivers will be forwarded through command

channels to HQDA (DAEN-ZCE) WASH DC 20310.

§ 650.72 Investigation of complaints.

Each operating commander will establish procedures to investigate water pollution complaints and allegations from individuals and water pollution control authorities. In the case of a legal action or potential legal action, the matter will be reported immediately through judge advocate general channels to HQDA (DAJA-RL) WASH DC 20310.

§ 650.73 Water Pollution Control Report— (RCS DD-I&L (SA) 1383).

(a) The water pollution control report portion of the Environmental Protection Control Report is designed to provide HQDA with data on a phased and coordinated plan for control and abatement of water pollution for submission to OSD and OMB; and for development of the five-year Army Environmental Program. Detailed instructions for preparing and submitting this report are provided in subpart J of this part.

(b) The report will cover all portions of the water pollution control program where expenditure of funds for corrective actions is required. This includes all fixed facilities, monitoring equipment, watercraft and other mobile facilities.

Subpart D—Air Pollution Abatement

GENERAL

§ 650.81 Purpose.

The provisions contained in this chapter implement the Clean Air Act of 1970 (Pub. L. 91-604 as amended) and the applicable Federal and State Regulations issued pursuant to this Act; Executive Order 11752, Prevention, Control, and Abatement of Environmental Pollution at Federal Facilities; and DOD Instruction 4120.14, Air and Water Pollution Control.

§ 650.82 Goal and objectives.

It is the Department of the Army's goal to reduce the emission of pollutants into the air from both stationary and mobile sources to the lowest prac-

ticable limits, and at the earliest practicable date. Objectives for obtaining this goal are to—

(a) Identify air pollution emission sources, determine the kinds and amounts of pollutant emissions, and reduce pollutant levels to those specified by Federal, State, interstate, or local substantive standards.

(b) Procure commercial equipment and vehicles with internal combustion engines that meet emission standards, except for combat vehicles specifically excluded by Environmental Protection Agency (EPA) regulations.

(c) Insure that each piece of military equipment is designed, operated, and maintained so that it meets air emission standards unless specifically exempted.

§ 650.83 Explanation of terms.

(a) *Ambient air quality standards.* Those standards established pursuant to the Clean Air Act, for protecting public health and welfare.

(b) *Emission standards.* Permissible limits of emissions established by Federal, State, interstate and local authorities to achieve ambient air quality standards.

(c) *Implementation plans.* Plans developed and administered by a State to designate the methods used to implement, maintain, and enforce ambient air quality standards in air quality control regions. The plans present an inventory of emissions and their source; a comparison of current emissions with current ambient air quality conditions; amount of emission reduction necessary to attain the ambient air quality standards for each category of emission sources; and plans, including transportation control plans, for achieving emission reductions.

(d) *Mobile sources.* Vehicles, aircraft, watercraft, construction equipment and other equipment using internal combustion engines as the means of propulsion.

(e) *Monitoring.* The assessment of emissions and ambient air quality conditions, using techniques such as emission estimates, visible emission reading, diffusion or dispersion estimates, sampling, or measurement with analytical instruments.

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(f) *Motor vehicle.* Any self-propelled vehicle designed for transporting persons or property on a street or highway (section 213, Clean Air Act). Further defined in 40 CFR part 85.

(g) *National Emission Standards for Hazardous Air Pollutants.* EPA emission standards established for specified hazardous air pollutants emitted by both new and existing stationary sources. (Section 112, Clean Air Act.)

(h) *Parking facility.* Any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

(i) *Standards of performance for new stationary sources.* Emission standards established for specified pollutant sources, such as industrial facilities (section 111, Clean Air Act).

§ 650.84 Policies.

(a) Control and monitor fixed air pollutant sources to ensure compliance with Federal, State, interstate and local substantive air emission standards.

(b) Monitor ambient air quality in the vicinity of Army industrial-type activities, or cooperate with others in such monitoring to determine whether current ambient air standards are being met.

(c) Control emissions from mobile sources in accordance with Federal regulations or by State regulations when authorized by law.

(d) Cooperate with Regional EPA and State authorities in achieving the objectives of State Implementation Plans.

§ 650.85 Responsibilities.

(a) The Chief of Engineers will—(1) Publish the basic policies and procedures for the identification, reporting, and programming of projects to control and monitor air pollutants emitted by Army fixed facilities and mobile sources, including aircraft and watercraft (DAEN-ZCE).

(2) Report requirements for projects to control sources of air pollution and the installation of air quality monitoring systems in accordance with this regulation and DOD Instruction 4120.14.

(3) Process requests for exemption from compliance in accordance with

the provisions of the Clean Air Act and Executive Order 11752.

(4) Include in the Army R&D Program such research as may be needed or required for the development of technology to control Army-unique air pollutants.

(5) Perform technical review and evaluation of remedial projects for the control of existing sources of air pollution at fixed facilities and insure that provisions are made for air pollution control in the design of new structures and facilities.

(6) Coordinate the requirement of the adoption of new air emission standards for the Army fixed facilities with The Surgeon General.

(7) Provide technical advice and assistance for the control of air pollution in the operation and maintenance of fixed facilities.

(8) Ensure all new construction or major modifications are reviewed by the applicable US EPA Regional Office to ensure compliance with the State Implementation Plan.

(b) The Deputy Chief of Staff for Logistics will issue implementing policies, procedures and instructions for the control of air pollution which pertain to the maintenance, repair and modification of mobile sources including vehicles, aircraft and watercraft.

(c) The Deputy Chief of Staff for Research, Development and Acquisition will—(1) Conduct research and development programs designed to provide low-pollution, high efficiency engines for Army vehicles, mobile power sources, aircraft, and watercraft; and for the development of clean burning fuels.

(2) Incorporate air pollution controls, where required, in the development of new equipment and weapons systems to the maximum extent possible without degrading the operational capabilities to an unacceptable level.

(3) Insure that mobile equipment and engines developed for the Army comply with applicable current and projected Federal emission standards to the extent that priority defense and national security requirements permit.

(d) The Surgeon General, will—(1) Monitor the health and welfare aspects of the air pollution control program within the Department of the Army.

(2) Issue health and medical policy guidance on air pollution control and abatement.

(3) Consult with COE and appropriate commanders in the establishment of air pollution control standards which are unique to the Army.

(4) Provide staff assistance and guidance on the health and environmental aspects of management of hazardous and toxic air pollutants.

(5) Provide support to the basic Army R&D Program in terms of identification/designation of R&D needs.

(6) Review proposed Federal, State, interstate and local emission/ambient air quality standards and coordinate DA input to the standard-setting process.

(e) Major Army commanders will—(1) Develop a program, consistent with this regulation and DOD guidelines to control and monitor air pollutant emissions from fixed and mobile facilities to comply with applicable Federal, State, interstate and local emission standards and ambient air quality standards.

(2) Ensure that personnel having responsibilities for controlling air pollution emissions (e.g. equipment operators and mechanics, heating plant operators, etc.) are properly trained to perform such duties. Further, provide training in the inspection, test and maintenance of pollution control devices and emissions measurement equipment.

(f) Commanding General, US Army Materiel Development and Readiness Command. In addition to responsibilities assigned in paragraph (e) of this section, the Commanding General, US Army Materiel Development and Readiness Command will—(1) Require that Army materiel equipped with internal combustion engines meet air emission standards in effect at the time of manufacture as required by Federal or State regulations.

(2) Ensure that the manufacture, shipment, operation, maintenance and final disposition of the materiel can be accomplished with a minimum emission of air pollutants.

(3) Provide in technical publications appropriate information and instructions on air pollution controls for engine driven equipment and on maintenance

and monitoring procedures for minimizing pollutant emissions.

(g) Commanding General, US Health Services Command will—(1) Assist The Surgeon General in fulfilling his responsibilities for the health and welfare aspects of the air pollution control programs.

(2) Provide personnel for conducting field investigations and special studies on sources of air pollution and for recommending measures required to protect health and welfare, and to comply with stationary or mobile emission standards or ambient air quality standards (§650.92).

(h) Installation and activity commanders will—(1) Monitor air emission sources within their installations or under their control and identify air emission sources requiring remedial action to ensure compliance with emission standards and ambient air quality standards.

(2) Program remedial projects and funds to control and monitor air emission sources and ambient air quality to insure compliance with emission standards and ambient air quality standards.

(3) Cooperate with representatives of Federal, State and regional agencies in the formulation and execution of the Installation Master Plan, projects, and operations to ensure conformance with the State Implementation Plan. This includes conformance with new source emission standards; new source review procedures for Federal facilities; air pollutant control strategies such as transportation control plans, vapor recovery systems, and air pollution emergency episode plans; and the requirement to obtain a consent agreement for sources not in compliance with applicable air pollutant emission standards.

(4) Monitor the operation of motor vehicles to permit compliance with applicable Federal or State emission standards; or in the absence of applicable standards, to minimize smoke emissions.

(5) Continue mechanic and operator training programs in the prevention, control and abatement of pollution from mobile equipment.

§ 650.86 Reports.

Sources of air pollution will be identified and those requiring remedial action will be reported as specified in subpart J of this part. An example of an exhibit prepared on a facility found not to be in compliance with specified standards is shown in figure 10-3.

§ 650.87 References.

See table 4-1 for related publications to be used in conjunction with this subpart.

STANDARDS AND PROCEDURES

§ 650.88 Standards.

(a) *General.* (1) The Clean Air Act establishes the legal basis for improving air quality and maintaining air quality for the protection of public health and welfare. Included in its provisions are the establishment of Air Quality Control Regions, which are approximately 250 in number; the establishment of National Ambient Air Quality Standards to identify the acceptable health and welfare levels which will be permitted for a given pollutant; allowable significant air quality deterioration zones which set the allowable amount of air quality deterioration; and the preparation of Implementation Plans by each State to provide for the attainment of primary standards by July 1, 1975 and secondary standards within a reasonable time. The Act also requires EPA to set Standards of Performance for new or modified sources of pollution; establishing source emission standards for hazardous air pollutants such as asbestos, beryllium and mercury; and controlling motor vehicle emissions.

(2) National Ambient Air Quality Standards prescribe maximum pollutant levels for particulate matter, sulfur oxides, carbon monoxide, photochemical oxidants, hydrocarbons and nitrogen oxides (40 CFR part 50). In all instances the States in their Implementation Plans have specified strict ambient air quality standards and established maximum levels for each pollutant based on the type of source. It is the applicable State standard that is to be achieved by each Army facility.

(b) *Fixed facilities*—(1) *Existing Sources.* Individual pollutants are to be controlled in accordance with national

primary and secondary air quality emission standards, normally those promulgated by a State. The basic reference is 40 CFR part 50.

(2) *New sources.* Specific Federal emission standards are applicable to certain types of new facilities such as large fossil fuel-fired steam generators, incinerators, sulfuric and nitric acid plants, etc. Detailed information is contained in 40 CFR part 60.

(3) *Air quality control regions.* Air quality control regions, criteria, and control techniques are given in 40 CFR part 81.

(4) *Hazardous air pollutants.* Certain hazardous air pollutants as such asbestos, beryllium, mercury, and vinyl chloride, which must be closely controlled are identified in Federal regulations promulgated by EPA. Refer to 40 CFR part 61 and § 650.132 for guidance on control of asbestos during demolition and prohibition on use of sprayed asbestos materials for any purpose.

(c) *Mobile sources*—(1) *Commercial or commercially-adapted vehicles.* The manufacturer is required to certify these vehicles as meeting established emission standards of the year of manufacture. Basic reference is 40 CFR part 85.

(2) *Military vehicles.* Certain military vehicles are excluded from the provisions of the Clean Air Act. Those not excluded will be certified by the manufacturer as meeting standards of the year of manufacture. Basic reference is 40 CFR part 85.

(3) *Replacement engines.* (40 CFR part 85).

(i) Light duty will meet the standards imposed at the year of vehicle manufacture.

(ii) Heavy duty will meet the standards imposed at the year of engine manufacture.

(4) *Aircraft.* Commercial or commercially adapted aircraft will comply with standards applicable to commercial aircraft in year of manufacture. Basic reference is 40 CFR part 87.

§ 650.89 Assessment of air quality.

The impact of emissions produced by the operation of fixed and mobile sources on air quality will be included in an Environmental Impact Assessment (EIA) or Environmental Impact Statement (EIS) of any Army proposed

action. Specific information as to existing regional air quality will be provided along with the changes or impact produced by the planned action. See also § 650.91 (b) on significant air quality deterioration zones for additional guidance. Particular attention will be given to vehicle emissions from both military and privately owned vehicles which, along with the vehicles in a nearby community, may constitute a significant source of air quality degradation and health hazard.

§ 650.90 Air pollution sources.

Common sources of air pollution which must be controlled include—:

- (a) Heating plants over one million BTU per hour input.
- (b) Incinerators.
- (c) Large electrical power generating plants.
- (d) Manufacturing processes/acid production facilities.
- (e) Metal cleaning and treatment operations.
- (f) Spray painting operations.
- (g) POL storage and dispensing facilities.

§ 650.91 Air pollution abatement and control.

(a) Existing fixed sources of air emission are subject to Federal and State standards promulgated under the Clean Air Act. Those facilities found not in compliance with such standards are to be promptly identified and reported in accordance with the procedures outlined in subpart J of this part. The programming and budgeting for remedial projects will conform with established procedures as in AR 37-40, AR 415-15, AR 415-25 and AR 420-10.

(b) New fixed sources or major modification to existing facilities which are a source of air emissions will be designed in accordance with applicable standards. Consultation with or review by State authorities on such projects will be through the Regional Administrator of EPA at the earliest practicable time in the planning process. Further, the State air pollution control agencies will establish significant air quality deterioration zones to control the introduction of pollutants into a specified area. Deterioration zones apply only to specific category of pol-

lutant such as particulates or nitric oxides. Zones will be established by the State and are as follows:

Zone I—Very little to zero deterioration.

Zone II—Moderate deterioration.

Zone III—May deteriorate up to the national maximum.

Implementation of these standards for Federal facilities is through the EPA review of preconstruction plans. This regulation significantly increases the power of States to control land use patterns. Therefore, all Army plans for development and expansion of facilities must consider the deterioration zone within which the affected installation is located. (40 CFR part 52).

(c) Emissions from new mobile sources such as vehicle and aircraft engines will be regulated at the time of manufacture and certified in accordance with Federal regulations issued by EPA. The alteration or removal of such emission controls installed on Army equipment is prohibited.

(d) The retrofit of military vehicles not equipped with emission control devices at the time of manufacture may be required by State regulation. Commanders of installations where such controls are required will take appropriate action to have such vehicles retrofitted and to insure that vehicles without emission controls are not operated unless a waiver or exemption as specified in § 650.95 is approved.

§ 650.92 Air emission monitoring and reporting.

(a) *Fixed sources.* Air emissions will be monitored in accordance with EPA approved State, regional or local regulations. The more common pollutants that are monitored include particulates, sulfur dioxide, carbon monoxide, oxides of nitrogen, hydrocarbons, and photochemical oxidants. Mandatory monitoring is imposed where more toxic emissions, such as nitric and sulfuric acid mists and asbestos, are released to the atmosphere. Such records on emissions as may be specified by EPA will be maintained and submitted as required.

(b) *Mobile sources.* The periodic monitoring of vehicle emissions serves to verify the effectiveness of emission

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controls and engine combustion efficiency. Installations having large vehicle fleets are encouraged to institute such monitoring procedures. No reports are required for these emission monitoring operations.

(c) *Technical assistance.* Technical assistance relating to health and welfare considerations of air pollution problems can be obtained from Commander, US Army Health Services Command (HSC-PA), Fort Sam Houston, TX 78234. Specific services available include:—

(1) Collection of pollutant emission data, operating criteria and performance standards for air pollution abatement equipment.

(2) Consultation on current Federal and State air quality regulations, standards and monitoring instrumentation.

(3) Source and ambient air evaluations to demonstrate compliance of existing sources with air quality regulations or standards.

(4) Provide assistance in collection and interpretation of air quality data for development of EIA or EIS.

§ 650.93 EPA Air Pollution Project review.

(a) The following type projects require review by the EPA Regional administrator for compliance with air pollution control standards prior to the initiation of construction:

(1) Large industrial or manufacturing facilities.

(2) Certain new parking facilities to be constructed in areas covered by Standard Metropolitan Statistical Areas and Transportation Control Plans (38 major urban areas) are subject to preconstruction review by the EPA Regional Administrator (40 CFR part 52). A review is required for parking facilities having a capacity of 250 or more vehicles, or where special restrictions are imposed on any additional parking. In such instances, an EPA permit must be obtained for new or modification of existing parking facilities which results in a net increase of 250 or more spaces when construction commences after January 1, 1975 or when a construction contract is signed after January 1, 1975. The basic references for State implementation plans and Transportation Control

Plans are 40 CFR part 51 and 40 CFR part 52 respectively.

(b) At the request of the installation commander, such reviews may be coordinated with the Regional EPA office by the supporting Corps of Engineers District Office.

§ 650.94 Consent agreements.

(a) A consent agreement is required for each existing fixed source of air pollution which exceeds applicable standards. The consent agreement must contain a compliance schedule which contains a chronological list of dates (milestones) for each major action to be completed within the overall plan to bring a polluting source into compliance.

(b) Consent agreements are negotiated by installation representatives with EPA Regional Offices and State air pollution control authorities. Once approved by EPA, the specified date when the facility will comply with air emission standards becomes legally binding on the installation commander. Further, the installation is required to inform the appropriate EPA Regional Office and State authority in writing of any foreseen delays in meeting the intermediate dates contained in the compliance schedule and the reasons therefore prior to the scheduled completion date. When it becomes apparent that the ultimate compliance date cannot be met for reasons beyond the control of the installation commander, a revised consent agreement should be renegotiated. In such cases the EPA Regional Administrator will be notified as soon as possible. If renegotiation of a compliance schedule is rejected by EPA, the installation commander may forward a request for an exemption (§ 650.95) from compliance from standards when continued operation of the facility is essential to the conduct of the DA mission.

§ 650.95 Exemptions.

(a) An exemption from compliance with air pollutant emissions may only be requested for existing facilities. New facilities are to be designed to meet established standards.

(b) Requests for exemption from the Clean Air Act and regulations promulgated pursuant to the Act will be based

on the continued operation of a particular facility being in the interests of national security and upon the requirements of Executive Order 11752. Such requests will be forwarded through channels to HQDA (DAEN-ZCE), WASH DC 20310 for necessary action.

§ 650.96 Transportation Control Plans.

(a) In addition to regulating the emissions from fixed sources, it may be necessary for a State to impose controls over transportation in order to achieve national ambient air standards. Large metropolitan areas, such as Los Angeles, California and Baltimore, Maryland are having to resort to such measures because the major portion of air pollution in those areas is caused by motor vehicles.

(b) Military installations and activities located within the area defined in EPA approved Transportation Control Plans are required to cooperate with local authorities in reducing vehicular traffic consistent with military requirements. Although the overall requirement is to reduce both military and civilian traffic, primary emphasis should be on reducing the use of privately owned vehicles. Consequently, Installation Transportation Control Plans which may be required for a particular region by Federal Regulations should be prepared and implemented as deemed necessary. Various control measures that will be considered include:

- (1) Instituting a command carpooling with carpool locator program,
- (2) Encouraging the use or expansion of public transportation service,
- (3) Restricting available parking areas to promote carpooling,
- (4) Issuing preferred parking spaces to carpool cars, and
- (5) Encourage the use of bicycles/walking for short on-post trips.

(c) Information regarding the existence of approved metropolitan Transportation Control Plans may be obtained from local air pollution control authorities or the Regional EPA Administrator.

§ 650.97 Air pollution emergency episode plans.

(a) Army installations or activities located in areas susceptible to air pol-

lution episodes (smog conditions) will cooperate with local authorities in reducing air emissions during such emergency periods. Specific contingency plans are to be developed and coordinated with the local air pollution emergency episode plans to provide for:

- (1) The curtailment of all but essential services;
- (2) To provide for required mission activities;
- (3) Announcement of notification procedures; and
- (4) Instructions on those control measures to be invoked during the various phases of such episodes. The following control measures are to be considered in such contingency plans:
 - (i) Restrict use of private automobiles by requiring carpools or use of mass transit facilities.
 - (ii) Conduct an educational program on the hazards of air pollution episodes.
 - (iii) Publicize episode warnings and notification procedures.
 - (iv) Postpone all except mission-essential activities which produce air emissions; (e.g., vehicle use, operation of incinerators, etc.).
 - (v) Grant personnel administrative leave, but only as a last resort. This action will be coordinated with other DOD and Federal installations in the affected area.

(b) The shutdown or reduction of activities should be well coordinated with all installation personnel. The plan will be implemented on a test basis upon completion and should be reviewed and tested on a biannual basis thereafter.

(c) Government assets provided a contractor managing a Government-owned facility, are subject to the same use restrictions during an air pollution emergency episode as those imposed on a contractor by a State on the use of his private assets.

TABLE 4-1—RELATED PUBLICATIONS

Clean Air Act (42 U.S.C. 1857 et seq., as amended by the Air Quality Act of 1967, Pub. L. 90-148, by the Clean Air Amendments of 1970, Pub. L. 91-604, and by Technical Amendments to the Clean Air Act, Pub. L. 92-157).

AR 11-28 Economic Analysis and Program Evaluation of Resources Management.

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AR 37-40 Army Production Base Support Program Report (RCS CSGLD-1123(R1) (MIN))
AR 40-4 Army Medical Department Facilities/ Activities.
AR 70-15 Product Improvement of Materiel.
AR 210-50 Family Housing Management.
AR 405-45 Inventory of Army Military Real Property.
AR 415-15 MCA Program Development.
AR 415-25 Real Property Facilities for Research, Development, Test and Evaluation (RHTE).
AR 415-35 Minor Construction.
AR 420-10 General Provisions, Organization, Functions, and Personnel.
AR 750-20 Prevention, Control, and Abatement of Pollution from Mobile Equipment.

Subpart E—Solid Waste Management

GENERAL

§ 650.105 Purpose.

This chapter defines Department of the Army policy, assigns responsibilities, and establishes procedures for the management of waste and resource recovery and recycling programs under the provisions of the National Environmental Policy Act of 1969 (NEPA), the Solid Waste Disposal Act, as amended (Resource Conservation and Recovery Act of 1976) and DOD Directive 4165.60.

§ 650.106 Goal.

Procure and use Army material resources in a manner that will minimize waste production and conserve natural resources. Reuse or recycling and reprocessing will be accomplished to the maximum extent practicable.

§ 650.107 Objective.

Specific objectives of the Army Solid Waste Management Program include:

(a) Design and procure materiel of such configuration that the end item or its components can be economically restored, reconstituted, or converted to other uses, when the end item and its packaging are no longer suitable for their original purposes.

(b) Dispose of unserviceable or excess materiel through property disposal channels or by some other means that would enable these resources to be recovered and reintroduces into the manufacturing process or reclaimed for

other purposes, including use as an energy source.

(c) Dispose of wastes not capable of being economically recycled or otherwise reclaimed, in a manner that will avoid or minimize pollution of the environment.

§ 650.108 Policy.

(a) Solid and other waste materials will be recovered and recycled to the maximum extent practicable.

(b) The quantities of solid and other waste materials will be reduced at the source wherever possible (e.g., through the use of minimum packaging, the increased use of returnable or reuseable containers, source separation for recycling, and other such reducing measures).

(c) The use of joint or regional resource recovery facilities, is encouraged when it will be advantageous to the Army.

(d) Optional recycling programs are those which are managed and operated by the Managing Activity (para 1-3f, AR 420-47) but are not required by AR 420-47. These programs are encouraged, and may either complement an installation operated program or be the sole recycling activity, provided that: (1) Such actions will not conflict with the mandatory aspects of Source Separation and Recovery Programs required by AR 420-47, (2) the end result is to further the recycling of trash and waste materials, and (3) the annual cost to the Government is not greater than that of the normal solid waste disposal system.

(e) Contracts for solid and other waste materials disposal services shall include provisions for recycling, whenever practicable.

(f) Design, procurement, and use of materials will be accomplished in such a manner that it minimizes the generation of waste to the greatest extent feasible.

(g) All appropriate DA installations and activities will cooperate to the extent practicable in beneficial civilian community-conducted recycling programs.

(h) Ultimate disposal of solid waste by landfill or incineration will be done in accordance with chapter 3, AR 420-47.

(i) All actions which implement the requirements of this regulation and which could be controversial will be assessed to determine if an Environmental Impact Statement is required, in accordance with subpart B of this part.

§ 650.109 Responsibilities.

(a) The Chief of Engineers will exercise primary Army staff responsibility for directing the Army Solid Waste Management Program and will:

(1) Promulgate policies and regulations on waste reduction, waste management, resource recovery, and recycling programs and waste disposal.

(2) Formulate, justify, and monitor Army programs and budgets pertaining to recycling programs.

(3) Monitor the solid waste management program and initiate reports as may be required.

(4) Maintain liaison with Office of the Assistant Secretary of Defense (Installations and Logistics), the Environmental Protection Agency and other Federal and private agencies who influence the waste management program.

(5) Coordinate with The Surgeon General on health aspects of solid waste management.

(b) The Deputy Chief of Staff for Operations and Plans will: (1) Ensure that the appropriate requirements documents include provisions for materiel reclamation, resource recovery, recycling and waste management throughout the life cycle of equipment, and

(2) Authorize specialized waste handling personnel on the table of distribution and allowances (TDA) of installations.

(c) The Deputy Chief of Staff for Research, Development and Acquisition will ensure the Research, Development, Test and Evaluation (RDT&E) program and the Army Procurement Accounting and Reporting System (APARS) major item program gives proper emphasis to waste reduction, equipment maintainability, and resource recovery/recycling.

(d) The Deputy Chief of Staff for Logistics will ensure that the Army logistical system places special emphasis on the reduction of waste, on maintainability, and on recycling, and that

appropriate TDA allowances for specialized equipment are made.

(e) The Surgeon General will:

(1) Monitor the health and welfare aspects of the waste management program, and accumulate, evaluate and disseminate data on program practices that may adversely affect the health and welfare of personnel and animals.

(2) Provide technical guidance to other headquarters, DA staff offices and appropriate commanders on health aspects involved in Solid Waste Management.

(3) Perform solid waste surveys at DA installations.

(f) Command and Installation responsibilities are as outlined in AR 420-47.

STANDARDS AND PROCEDURES

§ 650.110 Standards.

Installations and activities, in their waste disposal operations as well as in their resource recovery and recycling programs, will meet environmental pollution standards promulgated by duly authorized Federal, State, interstate, and local agencies. In addition, they will conform to the following waste management standards:

(a) Sufficient resources will be provided for the effective management of all wastes generated. Those wastes that cannot be recovered or recycled shall be disposed of in the most cost effective manner consistent with Army waste disposal requirements (AR 420-47).

(b) The installation commander may permit open burning when such burning does not conflict with local or State regulatory requirements, is accomplished during daylight hours, and is controlled to keep pollution of the air to a minimum.

(c) Wastes generated by any Army installation or activity will not be disposed of by open dumping. If suitable sites for sanitary landfill operations are not available on an installation, or municipal or private facilities for disposal are not available or are not cost effective, solid waste processing may

be accomplished using incinerators especially designed for that purpose. Incinerators will be designed and operated to meet all applicable air pollution control requirements (chap. 3, AR 420-47).

(d) When contracting for off-post disposal of solid wastes from Army facilities by municipal or private facilities, the contractor must comply with Federal, State, and local guidelines.

§ 650.111 Procedures.

(a) Operation of solid Waste Collection and Disposal Systems (including Source Separation and Resource Recovery) will be accordance with AR 420-47.

(b) "Army installations will comply with all Federal, State, interstate, and local requirements, both substantive and procedural, including permits and reporting (Pub. L. 94-580)." Resource Recovery facilities established in accordance with AR 420-47 will be compatible with State and local plans.

(c) Management of Army solid waste programs at the installation level will generally be accomplished by the element which is already functionally responsible for refuse collection and disposal. Recyclable/marketable materials will be referred to the Defense Property Disposal Service (DPDS) for sale.

(d) Duplication of effort will be avoided in the collecting, sorting and transporting of recoverable waste by combining new and existing efforts. Military Exchanges and Commissary Stores, which purchase or lease processing equipment, may salvage and dispose of their recoverable resources.

§ 650.112 Reports.

(a) Sources of solid waste will be identified, and those requiring remedial action will be reported as specified in subpart J. An example of an exhibit prepared on a typical solid waste facility found not to be in compliance with specified standards is at figure 10-5, (RCS DD-I&L(SA) 1383).

(b) The Managing Activity of a recycling program will complete an Annual Report of Solid Waste Source Separation and Resource Recovery/Recycling Operations in accordance with AR 420-47, (RCS DD-I&L(A) 1436).

§ 650.113 References.

Table 5-1 is a list of publications related to solid waste management.

TABLE 5-1—RELATED PUBLICATIONS

The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 432 *et seq.*

Solid Waste Disposal Act, as amended, 42 U.S.C. 3251 *et seq.* (Resource Conservation and Recovery Act of 1976, Pub. L. 94-580).

Pub. L. 93-552, Military Construction Authorization Act, FY 1975.

Executive Order 11752, Prevention, Control and Abatement of Environmental Pollution at Federal Facilities, 38 FR 34793, December 19, 1973.

Department of Defense Directive 5126.15, Delegation of Authority with Respect to Facilities and Equipment for Metal Scrap Baling or Shearing, or for Melting or Sweating Aluminum Scrap.

Department of Defense Directive 4165.60, Solid Waste Management—Collection, Disposal, Resource Recovery, and Recycling Program.

DoD Manual 4160.21M, Defense Disposal Manual, June 1973, authorized by DoD Directive 4160.21, Department of Defense Personal Property Disposal Program.

AR 11-28, Economic Analysis and Program Evaluation for Resource Management.

AR 37-108, General Accounting and Reporting for Finance and Accounting Offices.

AR 37-120, Procurement of Equipment and Missiles, Army Management of the PEMA Appropriations, Policies and Procedures.

AR 40-5, Medical Service, Health and Environment.

AR 235-5, Management of Resource, Commercial and Industrial Type Functions.

AR 415-15, MCA Program Development.

AR 420-47, Facilities Engineering, Solid Waste Management.

AR 750-36, Maintenance of Supplies and Equipment, Rebuild and Retread of Pneumatic Tires.

TM 5-634, Refuse Collection and Disposal; Repairs and Utilities.

TM 5-814-5, Sanitary Engineering—Sanitary Landfills.

Environmental Protection Agency Guidelines for Thermal Processing of Solid Wastes and for the Land Disposal of Solid Wastes (40 CFR parts 240 and 241).

Environmental Protection Agency Guidelines for Solid Waste Storage and Collection (40 CFR part 243).

Environmental Protection Agency Guidelines for Resource Recovery Facilities (40 CFR part 245).

Environmental Protection Agency Guidelines for Source Separation for Materials Recovery (40 CFR part 246).

Subpart F—Hazardous and Toxic Materials Management

GENERAL

§ 650.121 Purpose.

The provisions contained in this chapter implement the requirements of the Atomic Energy Act, as amended; the Energy Reorganization Act of 1974 and the Clean Air Act, as amended; the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as amended by the Federal Environmental Pesticide Control Act (FEPCA) of 1972; the Federal Water Pollution Control Act (FWPCA), as amended; the Marine Protection, Research and Sanctuaries Act of 1973 (MPRSA)—Ocean Dumping; the Solid Waste Disposal Act (SWDA), as amended and the Toxic Substances Control Act of 1976. Detailed guidance on oil and hazardous liquid substances spill prevention and contingency plans appears in subpart I of this part.

§ 650.122 Goal and objectives.

The Department of the Army (DA) goal is to control hazardous and toxic materials to minimize hazards to health and damage to the environment. The following objectives are necessary to achieve this goal:

(a) All material developed and procured by the Army is to be designed to minimize health and environmental hazards during research, development, testing, production, use, storage, and disposal.

(b) Limit, to the extent practicable, the use of toxic and/or hazardous materials, and employ procedures which provide maximum safety during storage, use, and disposal when less toxic or hazardous substitutes are not available.

(c) Develop safe and environmentally acceptable methods for the storage and disposal of materials which are inherently hazardous or potentially dangerous due to the quantities involved.

(d) Provide properly trained personnel for the management, use, storage, and disposal of hazardous and toxic materials.

§ 650.123 Explanation of terms.

(a) *Certification*. The recognition by a certifying agency that a person is com-

petent and thus authorized to use and supervise the use of restricted use pesticides.

(b) *Certified applicator*. Any individual who is certified to use or supervise the use of any restricted use pesticide covered by his certification.

(c) *Class 1 disposal site*. The location (e.g., sanitary landfill) where any final deposition of hazardous or toxic waste, after proper processing, may occur. Such a facility complies with EPA guidelines for the disposal of solid wastes as prescribed in 40 CFR part 241.

(d) *Disposal*. To abandon, deposit, inter or otherwise discard waste as a final action after its use has been achieved, a use is no longer intended, or its use has been declared excess, suspended or cancelled.

(e) *Effluent standard*. A State or Federal effluent standard or limitation to which a discharge is subject under the FWPCA amendments of 1972, including, but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards. This includes a prohibition of any discharge established, for any toxic pollutant described in 307(a) of the FWPCA as amended.

(f) *General use pesticide*. Pesticide for general public use not EPA Restricted Use Pesticide listing.

(g) *Hazardous and toxic material management*. For environmental purposes, the systematic and purposeful control over the production, procurement, storage, handling, use, and disposal of materials or substances which are either hazardous to life because of their inherent toxicity or a potential danger because of the quantities involved.

(h) *Hazardous substance*. An element or compound or mixture (other than oil as covered in subpart I of this part) which, when discharged in any quantity into or upon the navigable or coastal waters, presents an imminent and substantial danger to the public health or welfare, including fish, shellfish, wildlife, shoreline, and beaches, e.g., hazardous substances include some strong acids, strong bases, organic solvents, certain metals and their compounds, other strong oxidizers, or other bulk-stored chemicals used in manufacturing processes

and maintenance or repair operations. (Designation of and determination of removability of hazardous substances will be addressed in 40 CFR part 116).

(i) *Hazardous waste.* Any waste or combination of wastes which, if not effectively controlled, poses a potential hazard to human health or living organisms because they are nondegradable, persistent in nature, lethal, or may otherwise cause or tend to cause detrimental cumulative effects. Such materials include wastes which are corrosive, flammable, toxic, irritants, strong sensitizers or which generate pressure through decomposition, heat or other means.

(j) *Ocean dumping.* The disposal of hazardous or toxic materials (including pesticides, pesticide containers, pesticide-related wastes, other hazardous chemical stocks, pharmaceutical stocks of drugs, radioactive materials, explosive ordnance or chemical warfare agents) in or on the oceans and seas as defined in the MPRSA (Pub. L. 92-532).

(k) *Open burning.* The disposal by burning of hazardous or toxic materials or their wastes in any fashion other than by incineration in an approved hazardous waste incinerator.

(l) *Open dumping.* The placing of hazardous or toxic materials or their wastes in a land site in a manner which does not protect the environment and is exposed to the elements, vectors, and scavengers.

(m) *Pest.* Includes, but is not limited to, any insect, rodent, nematode, fungus, weed, or any form of plant or animal life or virus, bacterial organism or other micro-organism (except viruses, bacteria, or other micro-organisms on or in living man or other animals) which is normally considered to be a pest or which the Army may declare to be a pest in accordance with public law or national policy.

(n) *Pest management.* Pest control in which one or more control methods are selected for use in an integrated program that incorporates a series of alternative control strategies including parasites, predators, pathogens, cultural practices and chemicals, to achieve economic pest control with least disruption of the environment.

(o) *Pesticide.* Any substance or mixture of substances intended for pre-

venting, destroying, repelling, attracting, or mitigating any pest and any substances or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

(p) *Pesticide-related wastes.* All pesticide-containing wastes or pesticide-containing by-products which are to be discarded, but which, pursuant to acceptable pesticide manufacturing or processing operations, are not ordinarily a part of or contained within an industrial waste stream discharged into a sewer or the waters of a State.

(q) *Processing.* To neutralize, detoxify, incinerate, biodegrade, or otherwise treat a hazardous or toxic waste to remove its harmful properties or characteristics for disposal.

(r) *Restricted use pesticide.* A pesticide that is classified for restricted use under the provisions of section 3(d)(1)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C. 135 *et seq.*) and other legislation supplementary thereto and amendatory itself.

(s) *Soil injection.* The emplacement of hazardous or toxic materials or their wastes by ordinary tillage practices within the plow layer of a soil.

(t) *Toxicity.* The property of a substance or mixture of substances to cause any adverse physiological effects on any of the biological mechanisms of an organism.

(u) *Toxic pollutant.* Pollutants or combinations of substances (including disease-causing agents) which, after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism—either directly from the environment or indirectly by ingestion through food chains—will cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformations in such organisms or their offspring. (A list of toxic pollutants will be given in 40 CFR part 129).

(v) *Waste.* Any material for which no use or re-use is intended and which is to be discarded.

(w) *Water dumping.* The disposal of hazardous or toxic materials or their wastes in or on lakes, ponds, rivers,

sewers, or other water systems as defined in the FWPCA (33 U.S.C. 1251 *et seq.*)

§ 650.124 Policies.

The Department of the Army will—

(a) Exercise positive management over the research, development, procurement, production, use, handling, storage and disposal of hazardous and toxic material. Priority will be given to instituting measures required to protect health or control pollution.

(b) Comply with environmental quality policies and procedures specified in this regulation and those standards established by the applicable Federal, State, interstate, or local authority for the control of hazardous and toxic materials and substances.

(c) Use nonhazardous or nontoxic materials to the extent practicable.

(d) Conserve resources and, to the extent practicable, dispose of hazardous and toxic materials and waste by re-processing, recycling, and/or re-using.

(e) Program and budget sufficient resources for the effective management and environmental control of pesticides, hazardous chemical stocks, pharmaceuticals, radioactive materials, explosives, and chemical agents in accordance with DA regulations and in consonance with any other applicable Federal, State, or local objectives.

(f) Conform with Federal regulations and guidelines respecting pesticides, promulgated pursuant to the provisions of FIFRA as amended, (§§ 650.126 through 650.129).

(g) Acquire and use only those pesticides registered with the Environmental Protection Agency (EPA) (§ 650.126(a)).

(h) Monitor for the residual effects of pesticides on military installations in furtherance of the National Pesticide Monitoring Program.

(i) Conform with applicable Federal regulations, standards, and guidelines promulgated and adopted in accordance with the Atomic Energy Act, as amended (42 U.S.C. 2011), Energy Reorganization Act of 1974, or by EPA on discharges of radioactivity. This restriction does not apply to emergency operations conducted by Explosive Ordnance Disposal or Technical Escort personnel (§§ 650.139, 650.140 and 650.141).

(j) Prohibit the disposal (by open dumping, water dumping, well injection, or open burning) of pesticides, hazardous chemical stocks, pharmaceutical stocks and drugs, radioactive materials, explosive ordnance, or chemical warfare agents directly into the air, water, or land environment in a manner hazardous to man or animals or if it will cause unreasonable adverse effects on the environment (§ 650.127(f)).

(k) Conform with Federal regulations and guidelines respecting dumping of material into ocean waters in accordance with the MPRSA and the FWPCA as amended.

(l) In the absence of published national standards, guidance on acceptable methods and maximum concentrations pertaining to the use, storage, discharge or disposal of hazardous and toxic substances are to be referred through Major command headquarters to the USA Health Services Command.

(m) Comply fully with the DOD Pest Management program.

§ 650.125 Responsibilities.

(a) Department of the Army Staff.

(1) The Inspector General and Auditor General will—(i) Exercise primary Army Staff responsibility for overall supervision of Army safety program activities as established by AR 385-10.

(ii) Provide assistance and guidance on the safety aspects of the storage, use, handling, and disposal of hazardous and toxic substances.

(2) The Deputy Chief of Staff for Operations and Plans will—(i) Ensure that Required Operational Capability (ROC) documentation for new material involving potentially hazardous materials requires that safe and environmentally acceptable methods for storage and disposal of these materials be developed or included as part of procurement specifications.

(ii) Provide single DA contact point for all chemical warfare activities including demilitarization and disposal.

(3) The Deputy Chief of Staff for Research, Development and Acquisition will ensure that all materiel developed by the Army is designed to minimize health and environmental hazards during research and development, production, testing, storage, use and disposal.

(4) The Chief of Engineers will—(i) Exercise primary Army Staff responsibility for coordinating guidance and promulgating environmental protection regulations concerning hazardous and toxic material management within the Army.

(ii) Provide technical instructions and guidance on the implementation of pest management programs.

(iii) Coordinate with The Surgeon General to establish Army criteria, instructions, and corrective measures involving pollution from hazardous and toxic materials.

(iv) Promote the reclamation, recycling, or safe disposal of excess and outdated chemicals, particularly the stocks of cancelled or excess pesticides and superseded chemicals.

(5) The Surgeon General will—(i) Establish health criteria and standards and monitor health and welfare aspects of the hazardous and toxic material management program.

(ii) Develop environmental toxicology data and recommend standards for safe storage, use, discharge and disposal of hazardous and toxic materials.

(iii) Provide technical instructions and guidance for the DA pest management programs in disease vector control, pesticide monitoring, health, safety, and the training of pesticide applicators.

(iv) Coordinate with the Chief of Engineers in establishing criteria, instructions, and corrective measures involving pollution from hazardous and toxic materials.

(6) The Judge Advocate General will provide guidance, as required, on interpretation of FIFRA, FEPCA, FWPCA, MPRSA, SWMA and other Federal, State, and local laws and regulations.

(b) Commanding General, US Army Materiel Development and Readiness Command (DARCOM) will—

(1) Establish training programs for logistical personnel involved in the production, testing, and storage of explosives and chemical munitions and for those handling radioactive materials, hazardous and toxic chemicals, and products.

(2) Conduct research and technological investigations in support of the hazardous and toxic materials pollution abatement efforts related to in-

dustrial facilities operated by DARCOM. This includes development of alternative less polluting industrial processes, development of industrial waste recycling systems, evolution of treatment processes and design criteria, and development of safe and profitable disposal methods.

(3) Ensure compliance with DA and other Federal regulations on the disposal of chemical agents and munitions (§§ 650.130–650.134 and §§ 650.139–650.141).

(4) Procure materials for Army use which will minimize health and environmental hazards during production, use, storage, and disposal.

(c) Commanding General, US Army Health Services Command will—

(1) Conduct training activities to ensure proficiency in the application, handling, storage, use, and disposal of pesticides to qualify pest control personnel for certification in accordance with the FIFRA 1972, as amended, and EPA guidelines.

(2) Provide personnel for conducting field investigations and special studies concerning hazardous and toxic materials and for recommending measures required to protect health and welfare and to comply with standards.

(3) Conduct the DA pesticide monitoring program in accordance with AR 40-5 to complement the National Pesticide Monitoring Program.

(d) Major Army commanders will—

(1) Establish a program for the control of hazardous and toxic materials management for the protection of the health and welfare of personnel and the natural environments.

(2) Program and budget for necessary resources required for hazardous and toxic materials management and pest management programs.

(3) Certify and recertify as necessary, personnel employed in pest control activities after determination that personnel have received adequate training from an authorized and qualified source and have demonstrated proficiency in the application, handling, storage, use and disposal of pesticides in accordance with FIFRA, as amended. Such certification should identify the specific areas in which personnel are fully qualified.